



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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OFFICE OF
ENFORCEMENT AND
COMPLIANCE MONITORING

MEMORANDUM

SUBJECT: Decision in United States v. Kaiser Steel Corporation, No. CV-82-2623 IH (C.D. Cal. Jan. 26, 1984)

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TO: Regional Counsels, Regions I-X

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Regions II, IV, VI-VIII and X

The purpose of this memorandum is to apprise you of the recent decision in the Kaiser case. This decision may affect the case development of other opacity cases where the facts are similar. This memorandum also contains suggested guidance to deal with similar fact patterns.

On January 26, 1984, Judge Hill of the U.S. District Court for the Central District of California ruled from the Bench to assess a civil penalty of \$825,000 against Kaiser Steel Corporation and impose injunctive relief requiring the Corporation's one remaining blast furnace to achieve and demonstrate compliance with the applicable requirements if and when operations are resumed. The United States as the prevailing party will also receive the ordinary costs of litigating this case provided for under Rule 54 of the Federal Rules of Civil Procedure. A copy of the Judgment entered on February 8, 1984 and relevant portions of the transcript are attached.

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The complaint in this action was filed on May 26, 1982 and alleged violations of the California State Implementation Plan requirement for visible emissions at Kaiser's blast furnace cast houses located in Fontana, California.^{1/} The Judge assessed a civil penalty of \$825,000 for 33 individual violations by Kaiser of the California SIP. In assessing the maximum civil penalty under the Clean Air Act the Judge found that "[a]ll in all, the evidence indicates to me cavalier conduct on the part of defendant for which it must pay the price."

Summary of Decision

The government argued that the appropriate manner in which to prove a violation of Rule 50-A was to aggregate^{2/} the 15 second readings to determine if opacities of equal to or greater than 20% were present for more than 3 minutes in an hour. In so arguing it was the government's contention that 40 CFR 52.12(c),

^{1/} Rule 50-A, the visible emission standard to which Kaiser was subject in this case, is a time exemption standard that prohibits emissions of 20% or greater opacity for more than 3 minutes in any hour. No test method was prescribed for in the California SIP.

^{2/} The terms "aggregate" or "aggregation" as used in this memorandum refer to a way of analyzing opacity readings made at the plant to determine compliance with the time exemption standard. Momentary visible emission readings are made and recorded at 15 second intervals by a trained field observer. The first step of data analysis is to identify all readings that exceed the allowable opacity limit (i.e., Rule 50-A, opacity equal to or greater than 20% occurring within an hour). The second step is to count the number of individual readings that exceed the allowable opacity limitation in the SIP. The third step is to multiply the number of readings that exceed the allowable opacity limit by 15-seconds, the time period representing each reading, (i.e., 13 readings exceed standard X 15-seconds = 3 minutes, 15 seconds). The last step is to compare the amount of time in which the actual opacities exceeded the allowable standard and the time exemption period in the SIP. Under the time exemption period in the Kaiser case (i.e., 3 minutes in any hour), the casthouses were alleged to be in violation if opacity of equal to or greater than 20% exceeded the time exemption period of 3 minutes in any hour.

The term "averaging" is used in this memorandum in reference to the data analysis procedures prescribed in Method 9 Section 2.5 (40 CFR Part 60, Appendix A, Method 9 - Visual Determination of the opacity of Emissions From Stationary Sources). Opacity is determined by an average of 24 consecutive observations recorded at 15-second intervals. The average is computed by summing the opacity of the 24 observations and dividing by 24.

portion of the regulations applicable for federal enforcement of SIPs without test methods, required the use of only the "appropriate" procedures within a Part 60 test method. The government further argued that, in this case, only the certification and field procedures of Method 9 were "appropriate" because the data analysis procedure in Method 9 of six minute averaging was incompatible with a time exemption standard of Rule 50-A which limited opacity levels to less than 20% except for three minutes in an hour.

Judge Hill strictly construed the provisions of the regulation at 40 CFR 52.12(c). He found that 40 CFR 52.12 directed EPA to use a test method in Part 60 when no method was included in the SIP, and in this case that meant Method 9. He concluded that all procedures of Method 9,^{3/} including the data analysis requirements, must be complied with in order to establish a violation under this test method. The Judge noted that this case was "...different from Donner Hanna, where the government did not bring itself and agreed that it didn't bring itself within the literal requirements of Method 9, asserting instead a power to disregard Method 9 and prove violations in some other way." Given his construction of Method 9, he found that a violation of Rule 50-A could be established only if all procedures of Method 9 were followed.

The Judge ruled that the emissions at the Kaiser blast furnace casthouse were continuous because they lasted for more than six minutes in duration. The Judge also ruled that the Preamble to the Federal Register publication which in part discussed the inapplicability of Method 9 to intermittent emissions with a time exemption standard was not binding on the government as an authoritative interpretation of existing law and regulations, but even if it were it would not be persuasive here because the Kaiser emissions were continuous in duration.^{4/}

The government recomputed its visible emission observation sheets using six minute averaging and was able to show that 33 of the 41 Method 9 observations were greater than 27.5% opacity.

^{3/} Method 9 is chiefly composed of 3 main sections - certification procedures for visible emission observers, field procedures for viewing emissions and the data reduction or averaging procedures.

^{4/} The 1974 preamble to Method 9 states: "EPA recognizes that certain types of opacity violations that are intermittent in nature require a different approach in applying the opacity standards than this revision to Method 9."

Judge Hill rejected the government's arguments that the potential maximum positive error of 7.5% should not be automatically subtracted from the opacity readings, given that Method 9 specifically states that the accuracy of the method must be taken into account when determining possible violations of applicable opacity standards and the potential maximum positive error is the only accuracy benchmark listed.

The Judge further concluded, based on his prior rulings of strictly construing 40 CFR 52.12(c) and Method 9, that admissions by Kaiser and expert testimony about inability to comply were incompetent evidence^{5/} for purposes of proving a violation, but could be used as corroborative evidence of an alleged violation otherwise provable under Method 9. Expert testimony and admissions, according to Judge Hill, could not be used to prove that Kaiser continuously violated the SIP.

The defendant raised the affirmative defense of technological and economic infeasibility. The government successfully argued based on the precedent of the Friends of the Earth v. Potomac Electric Power Co., 419 F. Supp. 528 (D.D.C. 1976) and the Supreme Court decision in Union Electric Co. v. EPA, 427 U.S. 246 (1976) that these were not total defenses to a civil action brought under the Clean Air Act. The Judge made an alternative holding and finding that even if these were total defenses the burden is on the defendant and it had not carried the burden by a preponderance of evidence.

In considering the penalty portion of the case the Judge ruled that each blast furnace casthouse was a separate source of emissions each subject to a maximum of \$25,000 per day of violation. He based his rulings on the language of Rule 50-A which applies to "...any single source..." and Section 113(b)(2) which authorizes a civil penalty for any person who violates "...any requirement of an implementation plan... ."

The government requested costs of litigation pursuant to Section 113(b). Judge Hill found this provision of the statute to be absolutely unintelligible as a basis for awarding costs to the government "I would not and I could not, use such an irrational and unintelligible sentence as the basis for sanctioning or punishing anybody."

^{5/} "Incompetent evidence" refers to the legal relevance of the evidence in terms of admissibility.

Interim Guidance Procedure

This guidance on the use of Method 9 should be followed for those cases involving the enforcement of a visible emission time exemption standard in a SIP which does not contain a specific test method and where, for federal enforcement purposes, Method 9 is used based on the direction of 40 CFR 52.12(c). This guidance is not intended to suggest that the government should abandon the positions argued in the Kaiser case. Its purpose is to preserve the ability to prevail on alternative grounds should a judge in another case follow the same analysis as Judge Hill. A technical guideline on alternative opacity data reduction procedures for use with time exemption opacity rules is being developed by the Office of Air and Radiation and when published will supercede this interim guidance.

Visible emission observers should not reduce the data they collect in the field. They should forward the standard visible emission observation sheets to the appropriate officials in the Region. An observer should be instructed to record opacities for at least one hour, or in the alternative, to record opacities for a complete cycle of the emissive operation being observed, such as a casting operation at a blast furnace casthouse.

The attorneys and technical personnel reviewing the visible emission observation sheets should first aggregate all the 15 second opacity readings that equal or exceed the allowable levels to determine compliance with the time exemption period in the SIP. Where the 15 second opacity readings show a violation when aggregated, all 6 minute blocks of 24 consecutive observations containing such readings should be averaged as prescribed under Method 9. The strongest case possible for sustaining a violation, given the Donner Hanna and Kaiser decisions, would be when both the aggregation and averaging of the data show a violation. This period would consist of any 24 consecutive observations that contain opacities, when averaged or aggregated, would exceed the opacity level in the standard. A set of observations may contain one or more data gaps or interferences for which no opacity is recorded. In the Kaiser case the attorneys gave a 0% opacity value to those 15-second opacity blocks that had no opacity record because of interference obstructing a clear line of sight. Using a 0% opacity in the averaging of the set of observations is very supportable given that the bias is in favor of the source being observed. Additionally the data gap could be filled by a statistical procedure such as regrouping of data or substitution of a derived value (outlier test), but such proof may require the use of an expert or lay expert in statistics to testify about the validity of such practices.

The Regional legal and technical personnel should be aware of the potential evidentiary problems associated with litigating an opacity case with facts like the Kaiser case when opacity readings do not show a violation of the applicable standard by both the averaging and aggregating data reduction techniques. For this reason, we recommend that the Region review the visible emission observations of each case presenting a factual situation similar to Kaiser to determine whether the violation can be proved by both the aggregating and averaging data reduction procedures.

Attorneys in opacity cases should not concede the issue of whether 7.5% error should be subtracted from each 6 minute average. The attorneys, if the facts warrant such action, should provide in the form of an exhibit to be followed by testimony of an opacity expert the analysis of the Method 9 data base, thus demonstrating the range of potential maximum positive and negative errors.^{6/}

The Agency is currently working to evaluate the need for test methods for time exemption standards, but in the interim it is essential that a vigorous enforcement effort continue to ensure compliance with visible emission standards. This memo is not intended to set out a complete guideline or provide answers to all potential questions raised by the Kaiser decision but rather to bring some of the more pertinent points to the attention of other EPA staff involved in similar cases.

If you have any questions regarding the Kaiser case or this interim guidance, please contact Richard Ostrov of the Air Enforcement Division of the Office of Enforcement and Compliance Monitoring at 382-2863.

^{6/} The government's expert witness on opacity, in the Kaiser case, testified based on his work with the Method 9 data base, that at a 99% confidence level the positive bias of a 6 minute average was 7.5%, as published, but the negative bias was even greater (13%). Further, he stated that at the 95% confidence level the positive bias was 5%, as published, but again the negative bias was, at 9.4%, greater. Finally, he testified that the confidence level at 51%, or at a civil standard of proof, was -.6%. In other words, the expert witness testified that there is a net negative bias inherent in Method 9. The type of testing presented by the expert along with an exhibit demonstrating the analysis is perhaps the best way of presenting this factual issue.